

### ABSTRACT

An improved radio frequency diplexer has resonators which are associated either with the transmission path or with the reception path, and at least two additional resonators are also provided. The at least two additionally provided resonators form an interconnection resonator pair which are strongly coupled to one another. Both the transmission path and the reception path are coupled to the second additional resonator, or both the transmission path and the reception path are coupled to the first additional resonator which is provided for inputting to/outputting from the common signal path.